REMARKS

**Office action summary.** Claims 19-25 are rejected as anticipated or obvious over U.S. Patent Application Publication 2002/0002265 ("Hacker"). Claims 19 and 21-26 are rejected as anticipated or obvious over U.S. Patent Application Publication 2001/0026905 ("Uetani"). Claims 19 and 21-26 are also rejected as anticipated or obvious over WO 01/60938 ("Teiichi").[1] Claims 15-26 are rejected as obvious over U.S. Patent No. 5,406,694 ("Ruiz") in view of Teiichi. Claims 1-10 and 12-14 are rejected as obvious over Ruiz, Teiichi, and U.S. Patent No. 4,376,194 ("Tanaka"). Claim 11 is rejected as obvious over Ruiz, Teiichi, Tanaka, and U.S. Patent No. 5,431,884 ("Schafer").

These rejections are overcome by the amendments made in this response and otherwise traversed.

The withdrawal of the prior § 103 rejections over Hacker in combination with other references is most appreciated.

**Claim amendments.** Claim 6 is amended to drop one element of the Markush group. Claim 7 is correspondingly amended to change its dependency in light of the change to claim 6.

**Anticipation and obviousness rejections of claims 19-26.** The anticipation rejections of claims 19-26 are based on the incorrect assumption that a claim limitation found in the preamble, "an adhesive composition for use in bonding a ceramic material to a manufacturing tool," is not a binding limitation of the claim. While there are some circumstances in which it is permissible to ignore a claim limitation appearing in the preamble, case after case says that a claim limitation appearing in the preamble must be given effect if the applicant relies on that limitation to distinguish prior art. "Clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation." *Catalina Marketing Int'l Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808-09 (Fed. Cir. 2002); *see also, e.g., Invitrogen Corp. v. Biocrest Manufacturing, L.P.*, 327 F.3d 1364 (Fed. Cir. 2003). The quoted preamble limitation should therefore be seen as binding, not ignored. Since none of the purportedly anticipatory references (Hacker, Uetani, and Teiichi) discloses use of an adhesive to bond a ceramic material to a manufacturing tool, the anticipation rejections of claims 19-26 are not well taken.

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1 Teiichi is the first inventor's first name. The first inventor's last name is Inada.

Bonding to a tool is different from many other applications of adhesives in that the bond needs to be readily undone so the tool can be used with the next workpiece. Making an improvement to an adhesive which bonds to a tool is not the same as improving some other kind of adhesive used for some other purpose.

While the Examiner makes an obviousness rejection, the Examiner does not provide the reasoning required for an obviousness rejection, such as the motivation to modify the teachings of the references (Hacker, Uetani, and Teiichi) and use the process of those references in a preparation designed to bond a manufacturing tool to a ceramic material. Motivation to modify is essential in any obviousness finding over an individual reference. *B.F. Goodrich Co. v. Aircraft Braking Systems Corp.*, 72 F.3d 1577, 1582 (Fed. Cir. 1996) ("When obviousness is based on a particular prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference."). Hacker and Uetani do not even mention ceramics, or for that matter adhesion, since Hacker is about a planarization film and Uetani is about use of resist compositions as resists. Absent further reasoning, the obviousness rejection of claims 19-26 should also be withdrawn.

**Obviousness rejections of claims 15-26 over Ruiz in view of Teiichi.** The Examiner has combined Ruiz and Teiichi by noting that Ruiz teaches the making of sliders for disk drives (the main application which the inventors of this case had in mind), and Teiichi teaches a broad class of adhesives, so it is obvious to use adhesives from Teiichi's class in the making of sliders for disk drives. This rejection seems to be generic, in that the same reasoning would lead one to conclude that any adhesives not obviously unsuitable for disk drive slider manufacture would be obvious to use in Ruiz's disk drive slider manufacture process.

The only thing the Examiner says about why one would pluck out Teiichi's class of adhesives from among all other adhesives to use in Ruiz's slider manufacturing process is that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to adhere the ceramic chunk to the ceramic manufacturing tool as taught by Ruiz using the thermoset adhesive including solvent taught by Teiichi et al. which has excellent heat and moisture resistance with no volatilization." (Office Action at 6.) However, "excellent heat and moisture resistance with no volatilization" do not rank high in the qualities required for an adhesive for slider manufacture. Those qualities by themselves would not motivate a person of skill in the art to use an adhesive in Teiichi's class rather than any of the hundreds or thousands

of other available adhesives. Instead, as the present application states at paragraph [0042], the desiderata for an adhesive for the applications of interest include the following:

> The resist is preferably be selected to provide an adhesive composition that is non-corrosive, especially to sensitive ceramic materials and surfaces, creates little or no thermal distortion when used to bond a ceramic material to another substrate, is easy and cost effective to prepare and use, allows the adhesive to function as a sealant to protect sensitive electronic components from exposure to corrosive environments, and is debondable from the substrates leaving no contamination on the substrate. In addition, where appropriate, the resist is preferably selected to provide other desirable characteristics to the adhesive composition including compatibility with aqueous grinding and lapping chemicals, compatibility with oil lapping chemicals, and transparency so that post processing inspection may be easily conducted.

The Examiner also does not disclose any motivation to combine Ruiz with Teiichi beyond the rationale already discussed above regarding "excellent heat and moisture resistance with no volatilization." The motivation to combine is essential in an obviousness analysis over a combination of references. *See, e.g., In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

Furthermore, to get the compositions recited in claim 19, one must pluck out from Teiichi's broad class of epoxy adhesives not just any member of that class, but a resist adhesive specifically. Thus, the combination of Ruiz and Teiichi, even if it were proper, does not produce what is claimed, namely, a resist adhesive with particular solvents and used in a particular process, but rather produces a suggestion to use a much broader class of adhesives in Ruiz's process. Nothing whatever in Teiichi points to the resist resins as being of any particular interest or merit or utility compared to any other members of Teiichi's broad class of epoxy adhesives. Nothing points to any characteristics of those resins that one might see as making them especially useful in Ruiz's process.

The Examiner claims that "one of ordinary skill in the art at the time the invention was made would have readily appreciated that the novolac adhesive resin[s] taught by Teiichi et al. are considered resist adhesive resins in the art as both comprise the same." The novolacs are in general a broad class of phenol-formaldehyde and related polymers. While it is true that certain novolac resins are employed as resists, there is no teaching in Teiichi to employ such a resin in preference to a novolac resin which is not employed as a resist. Teiichi simply teaches a broad

class of epoxy resins and then, giving a long list of resins in that class, mentions novolac resins generally and then a few particular novolac resins by trade name.

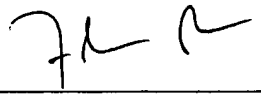
The mere disclosure of a large class of compounds does not render individual compounds obvious. *See, e.g., In re Baird*, 16 F.3d 380 (Fed. Cir. 1994). A fortiori, the disclosure of a great many epoxy resins in Teiichi does not render obvious the use of the resist resins that exist within Teiichi's broad class in connection with Ruiz's slider manufacturing process.

**Other obviousness rejections.** The remaining obviousness rejections are based on combining Ruiz with Teiichi and then other references. They are therefore not well taken because, as discussed above, the combination of Ruiz with Teiichi is not proper due to lack of a motivation to make the combination and the fact that the combination does not produce what is claimed.

**Claim 6.** Claim 6 has been amended to drop the novolac resist resins. Because the Taiichi disclosure is of novolac resins in general, and the Examiner has not discussed other possible resist resins found in Teiichi, it is believed that claim 6 should be allowable even over the Examiner's combination of Teiichi, Ruiz, and Tanaka.

**Conclusion.** For the reasons explained above, the Examiner's rejections are not well taken. If it would be helpful for the clarification of this response or any other issue, it would be appreciated if the Examiner would call the undersigned at his direct dial (650) 251-7712.

Respectfully submitted,

By: 

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